Table S1. UV-vis spectral data for the interaction of $H_2t(py)P$ with $H_2C_2O_4$ in CH_2Cl_2.

Porphyrins and the dications	Soret band (λ/nm)	Q(0,0) band (λ/nm)
$H_2t(2\text{-}py)P$	417.0	642.2
$H_2t(2\text{-}py)P(H_2C_2O_4)_2$	449.8	645.2
$\Delta\nu$ (cm^{-1})	-1748.7	-77.3
$H_2t(3\text{-}py)P$	418.0	646.4
$H_2t(3\text{-}py)P(H_2C_2O_4)_2$	439.7	636.2
$\Delta\nu$ (cm^{-1})	-1180.6	248.0
$H_2t(4\text{-}py)P$	416.0	643.0
$H_2t(4\text{-}py)P(H_2C_2O_4)_2$	443.1	654.3
$\Delta\nu$ (cm^{-1})	-470.2	-268.5

Table S2. UV-vis spectral data for the interaction of $H_2t(py)P$ with HNO_3 in CH_2Cl_2.

Porphyrins and the dications	Soret band (λ/nm)	Q(0,0) band (λ/nm)
$H_2t(2\text{-py})P$	417.0	642.0
$H_2t(2\text{-py})P(HNO_3)_2$	449.8	650.9
$\Delta\nu$ (cm^{-1})	-1748.7	-213.0
$H_2t(3\text{-py})P$	418.0	646.4
$H_2t(3\text{-py})P(HNO_3)_2$	441.9	639.6
$\Delta\nu$ (cm^{-1})	-1293.8	164.5
$H_2t(4\text{-py})P$	416.0	643.0
$H_2t(4\text{-py})P(HNO_3)_2$	453.2	647.5
$\Delta\nu$ (cm^{-1})	-1973.1	-107.9

Table S3. UV-vis spectral data for the interaction of H_2t(py)P with H_2SO_4 in CH_2Cl_2.

Porphyrins and the dications	Soret band (λ/nm)	Q(0,0) band (λ/nm)
H_2t(2-py)P	417.0	642.0
H_2t(2-py)P(H_2SO_4)$_2$	447.6	641.8
Δν (cm^{-1})	-1639.5	4.8
H_2t(3-py)P	418.0	646.4
H_2t(3-py)P(H_2SO_4)$_2$	436.3	633.9
Δν (cm^{-1})	-1019.0	305.0
H_2t(4-py)P	416.0	643.0
H_2t(4-py)P(H_2SO_4)$_2$	446.4	640.7
Δν (cm^{-1})	-1637.0	55.9